

**RFP# DOE-SGA-2012-15, COMMITTEE QUESTION, ALIGNMENT:**

Provide evidence of alignment to the current Standards of Learning including a comparative chart of content standards developed by your company to VA content standards for each content area/grade level that your proposed assessment(s) addresses and numbers of items for each standard. If you are planning to develop assessments in response to the contract being awarded, provide the content standards that you will include in your assessment(s) and the number of items you will develop for each standard with a timeline.

**CONSULTING, SERVICES AND SOLUTIONS GROUP, INC. RESPONSE:****Evidence of Alignment**

CSSG uses the Virginia Curriculum Framework and blueprint documents when aligning test items in our Standards of Learning Assessment Resource System. The remainder of this page provides alignment examples.

The following provides evidence of alignment of test items to the Virginia Standards of Learning (SOL) for existing assessments.

**Question 1 of 33 Item#: 104197 SOL: 3.1a**  
**ES: A EK: BT: E**  
**What is the value of 2 in 295,000?**

A 200  
 B 2,000  
 C 20,000  
 D 200,000

*Annotations:*  
 Bloom's Taxonomy "Evaluation"  
 SOL 3.1 a  
 Essential Knowledge and Skill 1st Bullet

**Question 33 of 33 Item#: 106294 SOL: 3.17c ES: K EK: BT: K**  
**The graph shows the favorite color of students in a class. Which color is the least popular?**

*Annotations:*  
 Bloom's Taxonomy "Knowledge"  
 SOL 3.17c  
 Essential Knowledge and Skill Bullet #11

Color	Number of Students
Blue	11
Yellow	2
Green	5
Purple	8
Orange	4

A Yellow  
 B Orange  
 C Green

The following provides additional evidence of alignment of test items to the Virginia Standards of Learning (SOL) for existing assessments.

<p>Question 32 of 35 Item#: 106239 SOL: 4.16b ES: D EK: BT: C</p> <p>Which is the associative property for addition?</p> <p>F <math>9 \times (5 \times 7) = (9 \times 5) \times 7</math> Bloom's Taxonomy "Comprehension"</p> <p>G <math>9 + 5 + 7 = 7 + 5 + 9</math> Essential Knowledge and Skill Bullet #4</p> <p>H <math>9 + (5 + 7) = (9 + 5) + 7</math></p> <p>J <math>9 + (5 + 7) = (5 + 7) + 9</math></p> <p>SOL 4.16b</p>	<p>Essential Knowledge and Skill Bullet #4</p> <p>Question 29 of 33 Item#: 102007 SOL: A.7f ES: D EK: BT: C</p> <p>If Sarah has 3 A's on her report card her parents give her \$45. If she has 5 A's she gets \$75, and if she has 7 A's she gets \$105. Which pattern describes the amount Sarah gets for her A's?</p> <p>A There is no pattern for the amount Sarah gets.</p> <p>B Sarah gets \$30 more than the number of A's she has.</p> <p>C Sarah gets 10 times the number of A's, minus \$15.</p> <p>D Sarah gets \$15 for every A she has on her report card.</p> <p>SOL A.7f Algebra</p>
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The content, knowledge and essential skills that are measured for each content area are as follows:

**Science Grade 3 – End of Course Content Area Skills Measured are:** The Virginia Science Standards and the associated cross-walked bulleted Essential Knowledge, Skills and Processes of the Virginia Curriculum Frameworks for each grade level are measured for this content area, complimented with cognitive skill measurement, since each item on the assessment forms are also aligned to Bloom's Taxonomy.

**The types of test items used are:**

- **Multiple Choice:** Math (Grades 2-EOC) , Reading/Writing (Grades 2-EOC) , Science (Grades 2 – EOC), History (Grades 3 – EOC)
- **Fill in the Blank:** Math (Grades 3- EOC) **Note:** Being expanded to all contents areas.
- **Drag and Drop:** Math (Grades 3 – EOC) **Note:** Being expanded to all content areas.
- **Hot Spot:** Math (Grades 3 – EOC) **Note:** Being expanded to all content areas.
- **Online Writing Tool:** Writing (Grades 5, 8, EOC)

**Modes of Delivery are:**

- Online
- Paper and Pencil
- Clicker Technologies (2013/2014 Academic Year)

**Science Assessments**

Our Standards of Learning Assessment Resource System has ■ science test items solely for use for student growth assessments. They are not available for use in the teacher item bank. Please see the chart below showing the reporting category alignment of the items provided in our Standards of Learning Assessment Resource System. Consulting, Services and Solutions Group, Inc. can modify this test to include additional items on the test and/or replace items.

Any modifications can be made within three (3) days of notification by VDOE, provided that existing Standards of Learning Assessment Resource System items will be used in the changes. If new items are to be created for this test, CSSG can create the items within ten (10) business days. At this time, CSSG is not developing additional assessments unless requested by VDOE for all districts. CSSG has provided the following assessments:

- Science 3, 4 and 5 Fall, Winter and Spring tests
- Science 6, 7 (Life Science), 8 (Physical Science) Fall and Spring tests
- Biology Fall and Spring tests
- Chemistry Fall and Spring tests
- Earth Science Fall and Spring tests

**Science 3 Fall**

<b>Reporting Categories:</b>	<b>Earth/Space System and Cycles</b>	<b>Force, Motion, Energy, and Matter</b>	<b>Life Processes &amp; Living System</b>	<b>Scientific Investigation, Reasoning, and Logic</b>
<b>Standards of Learning</b>	3.11a, 3.11b, 3.11c	3.2a, 3.2b, 3.2d,	3.5a	3.1c
<b>Questions</b>	4, 16, 19, 20, 26, 28	1, 2, 3, 5, 7, 8, 9, 10, 11, 12, 13, 17, 18, 21, 22, 23, 24, 25	6	14, 15, 27
<b>Total Number of Questions per Reporting Category</b>	<b>6</b>	<b>18</b>	<b>1</b>	<b>3</b>

**Science 3 Spring**

<b>Reporting Categories:</b>	<b>Earth/Space System and Cycles</b>	<b>Force, Motion, Energy, and Matter</b>	<b>Life Processes &amp; Living System</b>	<b>Scientific Investigation, Reasoning, and Logic</b>
<b>Standards of Learning</b>	3.11b, 3.11c, 2.6a, 3.8a	3.2a, 3.2d, 3.3b	3.4a, 3.4b, 2.4b, 3.5a, 3.5b, 3.5c, 3.6a	3.1c, 3.1g
<b>Questions</b>	2, 5, 14, 16, 19, 21, 27, 28	6, 10, 23	1, 3, 4, 8, 9, 11, 12, 13, 15, 17, 18, 20, 22, 24, 25, 26, 29	7, 30
<b>Total Number of Questions per Reporting Category</b>	<b>8</b>	<b>3</b>	<b>17</b>	<b>2</b>

**Science 3 Winter**

<b>Reporting Categories:</b>	<b>Earth/Space System and Cycles</b>	<b>Force, Motion, Energy, and Matter</b>	<b>Life Processes &amp; Living System</b>	<b>Scientific Investigation, Reasoning, and Logic</b>
<b>Standards of Learning</b>	3.8a, 3.9b	2.2a, 3.2b, 2.3b, 3.3b, 3.3c,	2.4b, 2.5a	3.1h
<b>Questions</b>	1, 2, 4, 12, 15, 17, 20, 27, 28, 30	5, 6, 7, 8, 9, 10, 11, 14, 16, 18, 21, 24, 25, 26, 29	19, 22, 23,	13
<b>Total Number of Questions per Reporting Category</b>	<b>10</b>	<b>16</b>	<b>3</b>	<b>1</b>

**Science 4 Fall**

<b>Reporting Categories:</b>	<b>Earth/Space System and Cycles</b>	<b>Life Processes &amp; Living System</b>	<b>Scientific Investigation</b>
<b>Standards of Learning</b>	4.6a, 4.6b, 4.6c	4.4c, 4.5a, 4.5d, 4.5e	4.1a, 4.1c, 4.1e, 4.1g, 4.1j
<b>Questions</b>	2, 6, 7, 12, 14, 15, 22, 23, 24	3, 4, 5, 9, 16, 17, 18, 20, 21, 25	1, 8, 10, 11, 13, 19, 26
<b>Total Number of Questions per Reporting Category</b>	<b>9</b>	<b>10</b>	<b>7</b>

**Science 4 Spring**

<b>Reporting Categories:</b>	<b>Earth/Space System and Cycles</b>	<b>Force, Motion, Energy, and Matter</b>	<b>Life Processes &amp; Living System</b>	<b>Scientific Investigation</b>
<b>Standards of Learning</b>	4.6a, 4.8b, 4.8e	4.2b, 4.2c, 4.2d, 4.3a, 4.3b, 4.3c, 4.3d, 4.3f	4.4a, 4.4b, 4.5d, 4.5e	4.1c, 4.1g
<b>Questions</b>	1, 2, 4, 8, 12, 17, 27, 28	3, 5, 7, 10, 11, 13, 14, 16, 20, 21, 22, 23, 25	6, 9, 15, 18, 19	24, 26
<b>Total Number of Questions per Reporting Category</b>	<b>8</b>	<b>13</b>	<b>5</b>	<b>2</b>

**Science 4 Winter**

<b>Reporting Categories:</b>	<b>Earth/Space System and Cycles</b>	<b>Force, Motion, Energy, and Matter</b>	<b>Scientific Investigation</b>
<b>Standards of Learning</b>	4.8a, 4.8b, 4.8c, 4.8d, 4.8e	4.2a, 4.2b	4.1a, 4.1c, 4.1e, 4.1g, 4.1i, 4.1j
<b>Questions</b>	2, 8, 10, 14, 17, 18, 20, 28	4, 7, 9, 16, 19, 21, 23, 25	1, 3, 5, 6, 11, 12, 13, 15, 22, 24, 26, 27
<b>Total Number of Questions per Reporting Category</b>	<b>8</b>	<b>8</b>	<b>12</b>

**Science 5 Fall**

<b>Reporting Categories:</b>	<b>Force, Motion, Energy, and Matter</b>	<b>Life Processes &amp; Living System</b>	<b>Scientific Investigation</b>
<b>Standards of Learning</b>	5.4a, 5.4b, 5.4c, 5.4e	5.5a, 5.5b	5.1b, 5.1c, 5.1e
<b>Questions</b>	1, 3, 8, 11, 13, 16, 19, 21, 23, 24, 26	4, 5, 6, 7, 10, 15, 18, 25	2, 9, 12, 14, 17, 20, 22
<b>Total Number of Questions per Reporting Category</b>	<b>11</b>	<b>8</b>	<b>7</b>

**Science 5 Spring**

<b>Reporting Categories:</b>	<b>Earth/Space System and Cycles</b>	<b>Force, Motion, Energy, and Matter</b>	<b>Life Processes &amp; Living System</b>	<b>Scientific Investigation</b>
<b>Standards of Learning</b>	4.6a, 5.6c, 5.7e, 4.8c	5.2b, 5.2c, 4.3a, 5.3b, 5.3c, 5.3d, 5.3e, 5.4b, 5.4c	4.4a, 4.4b, 4.4c, 5.5a, 5.5b	5.1b, 5.1g
<b>Questions</b>	6, 8, 13, 17	1, 3, 7, 9, 10, 12, 14, 16, 18, 19, 22, 24, 25, 26, 27	5, 11, 15, 20, 21, 23, 28	2, 4
<b>Total Number of Questions per Reporting Category</b>	<b>4</b>	<b>15</b>	<b>7</b>	<b>2</b>

**Science 5 Winter**

<b>Reporting Categories:</b>	<b>Earth/Space System and Cycles</b>	<b>Life Processes &amp; Living System</b>
<b>Standards of Learning</b>	5.6a, 4.6a, 5.6b, 5.6c, 5.7d, 5.7e, 4.8e	4.5a, 4.5e, 5.5b, 4.5d
<b>Questions</b>	1, 2, 3, 4, 5, 6, 8, 9, 10, 12, 14, 15, 16, 17, 18, 19	7, 11, 13
<b>Total Number of Questions per Reporting Category</b>	<b>16</b>	<b>3</b>

**Science 6 Fall**

<b>Reporting Categories:</b>	<b>Earth and Space Systems</b>	<b>Force, Motion, Energy, and Matter</b>	<b>Scientific Investigation</b>
<b>Standards of Learning</b>	6.3b, 6.3d, 6.3e, 6.6b, 6.6d, 6.6e	6.6a	6.1c, 6.1d, 6.1f, 6.1g, 6.1h, 6.1i
<b>Questions</b>	2, 3, 4, 7, 8, 9, 10, 12, 16, 18, 19, 20, 21, 22, 23	14	1, 5, 6, 11, 13, 15, 17, 24, 25, 26, 27, 28, 29, 30
<b>Total Number of Questions per Reporting Category</b>	<b>15</b>	<b>1</b>	<b>13</b>

**Science 6 Spring**

<b>Reporting Categories:</b>	<b>Earth and Space Systems</b>	<b>Ecosystems</b>	<b>Force, Motion, Energy, and Matter</b>
<b>Standards of Learning</b>	6.2b, 6.2c, 6.2d, 6.5c, 6.5e, 6.5f, 6.6e	6.7a, 6.7b, 6.7c, 6.7f	6.4a, 6.4d, 6.4e, 6.4f, 6.5a, 6.5b
<b>Questions</b>	2, 3, 5, 7, 11, 13, 15, 18, 22, 24, 25	1, 8, 9, 12, 17	4, 6, 10, 14, 16, 19, 20, 21, 23, 26
<b>Total Number of Questions per Reporting Category</b>	<b>11</b>	<b>5</b>	<b>10</b>

**Science 7 Fall**

<b>Reporting Categories:</b>	<b>Life Systems</b>	<b>Scientific Investigation</b>
<b>Standards of Learning</b>	LS.2a, LS.2b, LS.2c, LS.2d, LS.3a, LS.5a, LS.5b	LS.1a, LS.1c, LS.1f, LS.1h, LS.1i
<b>Questions</b>	2, 3, 5, 7, 10, 13, 14, 15, 17, 18, 19, 26, 27, 28, 29, 30, 31	1, 4, 6, 8, 9, 11, 12, 16, 20, 21, 22, 23, 24, 25
<b>Total Number of Questions per Reporting Category</b>	<b>17</b>	<b>14</b>

**Science 7 Spring**

<b>Reporting Categories:</b>	<b>Ecosystems</b>	<b>Life Systems</b>	<b>Scientific Investigation</b>
<b>Standards of Learning</b>	LS.12a, LS.12b, LS.12d, LS.12e	LS.13a, LS.2a, LS.2b, LS.4a, LS.4b, LS.4c, LS.5a	LS.1g, LS.12c, LS.12f
<b>Questions</b>	5, 6, 9, 10, 14	2, 7, 8, 12, 13, 15, 16, 17, 18, 20, 22	1, 3, 4, 11, 19, 21
<b>Total Number of Questions per Reporting Category</b>	<b>5</b>	<b>11</b>	<b>6</b>

**Science 8 Fall**

<b>Reporting Categories:</b>	<b>Force, Motion, Energy, and Matter</b>	<b>Scientific Investigation</b>
<b>Standards of Learning</b>	PS.11c, PS.2a, PS.2b, PS.2c, PS.2e, PS.3a, PS.3b, PS.4a, PS.4b, PS.4c, PS.7a, PS.7b	PS.1b, PS.1c, PS.1d, PS.1f, PS.1g, PS.1n
<b>Questions</b>	1, 2, 4, 5, 6, 7, 8, 9, 10, 13, 14, 16, 17, 18, 21, 23, 25, 26, 27, 28, 29, 30, 31	3, 11, 12, 15, 20, 22, 24, 19
<b>Total Number of Questions per Reporting Category</b>	<b>23</b>	<b>8</b>

**Science 8 Spring**

<b>Reporting Categories:</b>	<b>Force, Motion, Energy, and Matter</b>	<b>Scientific Investigation</b>
<b>Standards of Learning</b>	PS.10b, PS.10c, PS.10d, PS.2b, PS.2d, PS.4c, PS.5b, PS.5c, PS.6a, PS.6b, PS.7c	PS.1b
<b>Questions</b>	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32	6
<b>Total Number of Questions per Reporting Category</b>	<b>31</b>	<b>1</b>



**Earth Science Fall**

<b>Reporting Categories:</b>	<b>Cosmology, Origins, and Time</b>	<b>Earth Material and Processes</b>	<b>Earth Resource and Human Interactions</b>	<b>Scientific Investigation and the Nature of Science</b>
<b>Standards of Learning</b>	ES.13b	ES.4a, ES.5b, ES.5c, ES.7a, ES.7b	ES.4b, ES.6b, ES.6c, ES.6d	ES.1a, ES.1c, ES.1d, ES.2a, ES.2c, ES.3b, ES.3c
<b>Questions</b>	2, 16, 25, 33, 39	1, 4, 9, 10, 13, 17, 19, 20, 27, 29, 35, 37, 40	7, 12, 15, 18, 21, 28, 36, 38	3, 5, 6, 8, 11, 14, 22, 23, 24, 26, 30, 31, 32, 34
<b>Total Number of Questions per Reporting Category</b>	<b>5</b>	<b>13</b>	<b>8</b>	<b>14</b>

**Earth Science Spring**

<b>Reporting Categories:</b>	<b>Cosmology, Origins, and Time</b>	<b>Earth Material and Processes</b>	<b>Earth Resource and Human Interactions</b>	<b>Scientific Investigation and the Nature of Science</b>
<b>Standards of Learning</b>	ES.13b	ES.4a, ES.5b, ES.5c, ES.7a, ES.7b	ES.4b, ES.6b, ES.6c, ES.6d	ES.1a, ES.1c, ES.2a, ES.3b, ES.3c
<b>Questions</b>	12, 18, 23, 30, 35	3, 7, 8, 10, 13, 15, 16, 17, 25, 27, 32, 34, 36	1, 6, 9, 14, 19, 26, 33	2, 4, 5, 11, 20, 21, 22, 24, 28, 29, 31
<b>Total Number of Questions per Reporting Category</b>	<b>5</b>	<b>13</b>	<b>7</b>	<b>11</b>

**Biology Fall**

<b>Reporting Categories:</b>	<b>Interaction of Life Forms</b>	<b>Life at the Molecular and Cellular Level</b>	<b>Life at the System and Organism Level</b>	<b>Scientific Investigation</b>
<b>Standards of Learning</b>	BIO.7a, BIO.7d, BIO.2c, BIO.7c	BIO.3c, BIO.5g, BIO.5b, BIO.3d, BIO.3b, BIO.5a, BIO.6e, BIO.3a, BIO.3e	BIO.4c, BIO.5d, BIO.4b, BIO.6a, BIO.5d, BIO.4c, BIO.2b	BIO.1i, BIO.1c, BIO.1j, BIO.1k, BIO.1f, BIO.1g, BIO.1a
<b>Questions</b>	9, 10, 12, 21, 34, 37	2, 4, 7, 8, 13, 14, 16, 17, 22, 26, 27, 30, 31, 33, 35	1, 5, 6, 18, 23, 24, 25, 28, 32, 36	3, 11, 15, 19, 20, 29, 38, 39, 40
<b>Total Number of Questions per Reporting Category</b>	<b>6</b>	<b>15</b>	<b>10</b>	<b>9</b>

**Biology Spring**

<b>Reporting Categories:</b>	<b>Interaction of Life Forms</b>	<b>Life at the Molecular and Cellular Level</b>	<b>Life at the System and Organism Level</b>	<b>Scientific Investigation</b>
<b>Standards of Learning</b>	BIO.2c, BIO.7a, BIO.7c, BIO.7d	BIO.2a, BIO.3a, BIO.3b, BIO.3c, BIO.3d, BIO.3e, BIO.5a, BIO.5b, BIO.5g, BIO.6e	BIO.2b, BIO.4b, BIO.4c, BIO.5d, BIO.6a	BIO.1a, BIO.1c, BIO.1f, BIO.1g, BIO.1i, BIO.1j, BIO.1k
<b>Questions</b>	7, 8, 10, 21, 23, 37	2, 5, 6, 11, 12, 14, 15, 19, 22, 24, 28, 29, 32, 33, 35	3, 4, 16, 18, 25, 26, 27, 30, 34, 36	1, 9, 13, 17, 20, 31, 38, 39, 40
<b>Total Number of Questions per Reporting Category</b>	<b>6</b>	<b>15</b>	<b>10</b>	<b>9</b>

**Chemistry Fall**

<b>Reporting Categories:</b>	<b>Atomic Structure and Periodic Relationships</b>	<b>Chemical Formulas, and Reactions</b>	<b>Molar Relationships</b>	<b>Scientific Investigation</b>
<b>Standards of Learning</b>	CH.2g, CH.2h, CH.2a, CH.2b, CH.2d, CH.2i, CH.2f	CH.3c, CH.3a, CH.3d, CH.3e, CH.3b	CH.4a, CH.4b	CH.1g, CH.1a, CH.1b, CH.1e
<b>Questions</b>	19, 20, 21, 22, 25, 28, 35, 36, 38	2, 8, 10, 11, 12, 13, 15, 16, 23, 24, 27, 30, 32, 33, 34	4, 6, 9, 14, 31	1, 3, 5, 7, 17, 18, 26, 29, 37, 39
<b>Total Number of Questions per Reporting Category</b>	<b>9</b>	<b>15</b>	<b>5</b>	<b>10</b>

**Chemistry Spring**

<b>Reporting Categories:</b>	<b>Atomic Structure and Periodic Relationships</b>	<b>Chemical Formulas, and Reactions</b>	<b>Molar Relationships</b>	<b>Scientific Investigation</b>
<b>Standards of Learning</b>	CH.2a, CH.2b, CH.2c, CH.2d, CH.f, CH.2g, CH.2h, CH.2i	CH.3a, CH.3b, CH.3c, CH.3d, CH.3e	CH.4a, CH.4b	CH.1a, CH.1b, CH.1c, CH.1e, CH.1f, CH.1g
<b>Questions</b>	17, 20, 22, 23, 24, 27, 30, 37, 38	6, 8, 9, 10, 11, 13, 14, 19, 25, 26, 29, 32, 34, 35, 36	2, 4, 7, 12, 33	1, 3, 5, 15, 16, 18, 21, 28, 31, 39
<b>Total Number of Questions per Reporting Category</b>	<b>9</b>	<b>15</b>	<b>5</b>	<b>10</b>